

Date: Friday, 02/05/2008 10:44:51 AM
 User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BK117 SKIDTUBE ASSEMBLY
Job Number : 38984	
Estimate Number : 12899	
P.O. Number :	Part Number : D117762011
This Issue : 02/05/2008 S.O. No. :	Drawing Number : N/A PRELIM
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SKIDTUBES	Drawing Revision : A PRELIM
Previous Run : 38440	Material :
Written By :	Due Date : 20/05/2008 Qty: 1 Um: Each
Checked & Approved By : <u>JUD 08.5.02</u>	
Comment : Est Rev:A 07.06.11 New Issue EC Est Rev:B 08-02-22 change to revA DD verified by:	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	DC	DOCUMENT CONTROL
-----	----	------------------



JUD 08.6.24 white labels only



PPR work + STC
08.06.27

Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D117-762-011 CHG001

08.06.26

2.0	38984A	BK117 SKIDTUBE ASSEMBLY
-----	--------	-------------------------

**Comment:** Sub-Component BK117 SKIDTUBE ASSEMBLYBatch: 3580 38984A

W

3.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------

**Comment:** PACKAGING RESOURCE #1

Pick Packing Kit

4.0	D35121	Wearplate
-----	--------	-----------

**Comment:** Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

WEARPLATE

Batch: B37618 x1 B39029

AS 08/05/10 (XL)

5.0	AN960JD10L	Washer
-----	------------	--------

**Comment:** Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

Washer

Batch: M164885

AS 08/05/12 (XL)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 28/01/24
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:44:51 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38984

Part Number: D117762011

Job Number:



Seq. #: Machine Or Operation: Description :

6.0 AN3C4A BOLT



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

BATCH: M107737

AS 08/05/12

7.0 AN451A Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bolt

BATCH: M107758

AS 08/05/12

8.0 D2972 Bushing



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bushing

BATCH: M14103

AS 08/05/12

9.0 MS21042L4 Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Nut

BATCH: M106051

AS 08/05/12

10.0 QC4 INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

S. 08/06/26

11.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D117-762-011

Location:

PPP Rev:

DRAFT

08/06/26

SAN-5 RED LABEL
w/ PAPERWORK

12.0 QC21 FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/06/26

Job Completion



MF 08-06-26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:45:16 AM
 User: Julie Lecocq

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	BK117/SKIDTUBE ASSEMBLY
Job Number :	38984A		
Estimate Number :	12898		
P.O. Number :		Part Number :	D117762041
This Issue :	02/05/2008	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D3582 REVA PRELIM
First Issue :	//	Project Number :	N/A
Previous Run :	38413A	Drawing Revision :	A PRELIM
Written By :		Material :	
Checked & Approved By :	<u>JLD 08-5-02</u>	Due Date :	20/05/2008
Comment :	Est Rev:A 07.06.11 New Issue EC Prototype for engineering use only (LG0005-32910) Est Rev:B 08-02-22 change to revA as per dwg DD verified by:		
		Qty:	1 Um: Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	DC	DOCUMENT CONTROL
-----	----	------------------



Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D117-762-041 CHG001

2.0	D2962150	3.540 Outer Tube, Extrud
-----	----------	--------------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2962-150

Extrusion

B 28672 M 8-5-7

3.0	SKIDTUBES 1	SKIDTUBESS RESOURCE 1
-----	-------------	-----------------------



Comment: LANDING GEAR RESOURCE 1

1-Determine square end of tube and deburr

2-Drill #30 pilot holes using DT8678. Do not open holes.

3- Deburr holes.

4.0	BENDING	BENDING MACHINE - SKIDTUBES
-----	---------	-----------------------------



Comment: BENDING MACHINE

Bend tube as per program on CNC Bender and Dwg D3582. Use 5/16" locator pin on buggy "A".

M 8-5-8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:45:16 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38984A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Cut Fwd end of the tube using DT8185

u 8-5-a

2-Cut Aft end at VC using DT8185

3-Deburr ends

4-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE***

5-Locate DT 8973 & Drill Ground wire hole on top of Tube.

6-Install 3/16 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill.

7-Drill pilot holes for wearplates using DT8974

8-Open wearplate holes and ground wire holes to Ø19/64" (0.297") as per Dwg D3582.

9-Open Aft Cap holes using .209" drill.

10-Deburr holes.

8-5-12

6.0

D2964

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Cap

Batch:

214101

BE

08/05/14

7.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld fwd cap D2964 per dwg D3582 and QSI 004

A/R AL ROD

Batch:

m107263
m107877

BE 08/05/14

2-Grind flush

DH 8-5-14

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:45:16 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38984A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

08/05/14 (8.0)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/05/14 (9.0)

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

D. M 8-5-14

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08.05.14

12.0

D2971

Cross Bolt Spacer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cross Bolt Spacer

batch

339011

BE 08/05/20

13.0

D2973

Cross Bolt Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Cross Bolt Spacer

Batch:

314636

BE 08/05/20

14.0

D36621

Crossbolt Spacer



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

SPACER

batch

339022

BE 08/05/20

15.0

D36623

Crossbolt Spacer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SPACER

batch

337190

BE 08/05/20

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:45:16 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38984A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

D35841

Web



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)
WEB B 39021

① M 8-5-15

17.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open X-Bolt holes to .750"(4Places) as per Dwg D3582, section B-B

2-Counter Sink X-BOLT holes as per Dwg D3582

3-Deburr and blow out chips from inside of tube.

4-Bond web as per Dwg D3582 & QSI 015

A/R 241 Sike Flex Batch: M07804

Exp Date: 8-0-1

5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B.

A/R AL ROD Batch: M107877

6-Grind welds flush

- Ann 8-5-20

M 8-5-15

BC 08/05/20

Tools: E

18.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

5 08/05/21 (X)

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5 08/05/21 (X)

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

PRESSURE WASH BR 08-05-21 ①

M107925

(1X)

11:00 am
320°F
11:30 am

M. 08/05/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed? _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:45:16 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38984A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

F2 08/05/21 ①

22.0

ALS41032130

Insert



Comment: Qty.: 36.0000 Each(s)/Unit Total : 36.0000 Each(s)

Insert

Batch: M 105819

HL

23.0

ALS4428165

Inserts



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Inserts

batch M 6989

***same as ALS7-428-165 QSI 0017 ***

HL

24.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install Wearplate & Ground Wire inserts as per Dwg D3582.

F2 08/05/21 ①

25.0

D2965

Cap, 105 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cap

Batch: B36033

B39389

HL

26.0

D35083

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARPLATE

Batch: B38431

HL

27.0

D35089

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARPLATE

Batch: B36417

HL

08-05-26 ①

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:45:16 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38984A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

28.0

D350811

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Batch:

WEARPLATE

~~B36412~~ B36419

HL

29.0

D350813

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARPLATE

Batch:

B36416

HL

30.0

D35583

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch:

B38613

HL

31.0

D35589

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch:

B36420

HL

32.0

D355811

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch:

B36419

HL

33.0

D355813

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch:

B36418

HL

34.0

AN3C4A

BOLT



Comment: Qty.: 28.0000 Each(s)/Unit Total: 28.0000 Each(s)

BOLT

Batch:

* m107737

HL

08-05-26 (X)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:45:16 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38984A

Part Number: D117762041

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

35.0	AN3C5A	Bolt
------	--------	------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Bolt
Batch: m/107737 *SL*

36.0	AN44A	Bolt
------	-------	------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Bolt
batch m/106918 *SL*

37.0	AN960C10L	washer
------	-----------	--------



Comment: Qty.: 28.0000 Each(s)/Unit Total : 28.0000 Each(s)
washer
Batch: m/107971 *SL*

38.0	AN960JD10L	Washer
------	------------	--------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
* Washer
batch m/104885 *SL*

39.0	AN960JD416L	Washer
------	-------------	--------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Washer
batch m/107088 *SL*

40.0	D3492049	Plug Assembly
------	----------	---------------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
PLUG ASSEMBLY
batch 1537288 *SL*

41.0	D3492051	Plug Assembly
------	----------	---------------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
PLUG ASSEMBLY
batch 1537289 *SL*

08-05-26 *QD*

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: D Date: 20/06/26
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:45:16 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38984A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

42.0

D3492053

Plug Assembly



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

PLUG ASSEMBLY

batch

538430

43.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign objects

2-Install Aft cap as per Dwg D3582, Detail "C"

A/R 241 Sika Flex Batch: M107804

Exp Date: 08/10

3-Install Wearplates as per Dwg D3582,

Note: Install Bolt and washer on Ground Wire inserts on top of tube see section D-D of dwg D3582

*****Do not install bolts where indicated on Dwg(Note #6)*****

A/R 241 Sika Flex Batch: M107804

Exp Date: 08/10

4-Wing Walk as per Dwg D3043 and QSI 005 4.4

M107892

08-05-26 (X)

44.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/05/27 (X)

45.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D117-762-041

Location:

PPP Rev:

PPP 38984

08/05/26 (X)

46.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/06/26

Job Completion



mf 08-06-26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

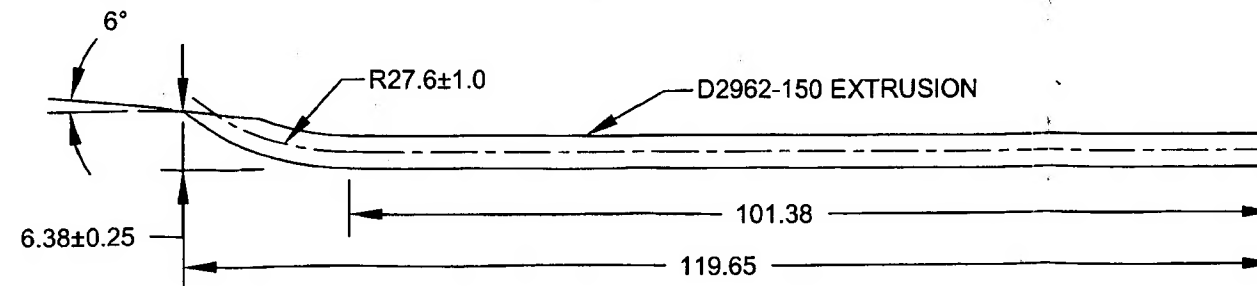
NOTE: Date & initial all entries

PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

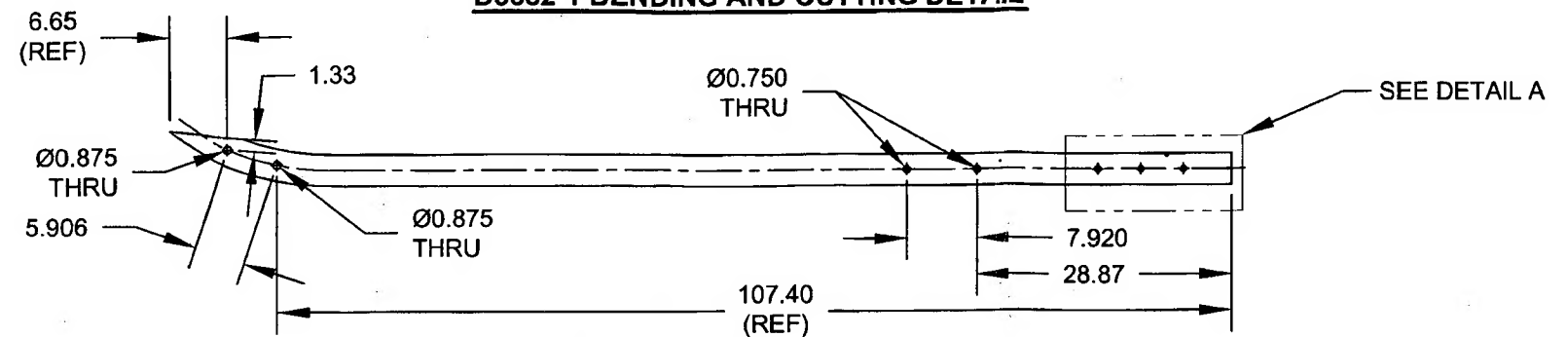
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

GENERAL NOTES:

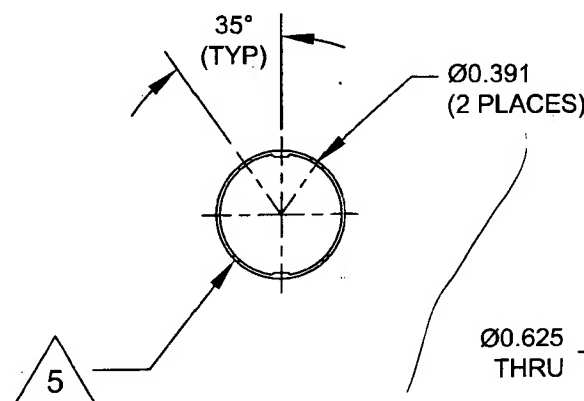
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI 004.
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL Ø0.297 HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS.
- FINISH:
 - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
 - POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
 - ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4



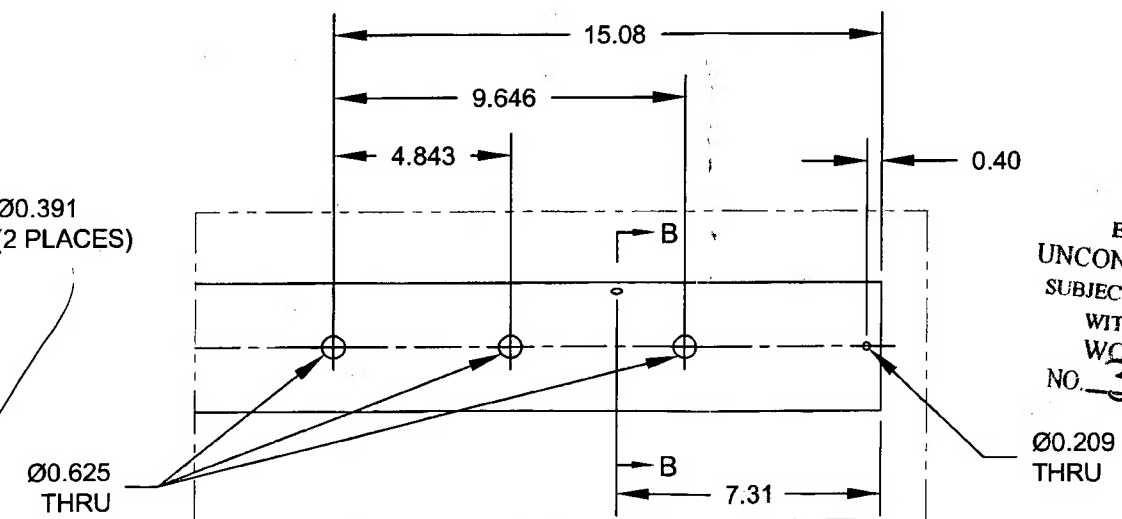
D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



SECTION B-B
SCALE 1:5



DETAIL A
SCALE 1:5

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 389841A

RELEASED
07.11.22

A	NEW ISSUE	PH	07.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	21	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	PAH		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	12	D3582	SHEET 1 OF 2
APPROVED	12	TITLE	SCALE
DE APPR.	12	BK 117 SKIDTUBE ASSEMBLY	1:20
DATE	07.06.08	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8

7

6

5

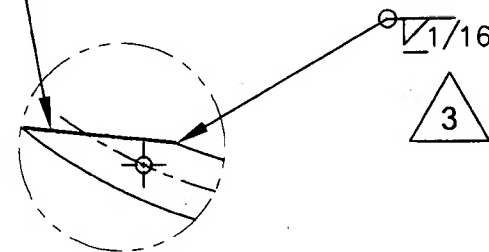
4

3

2

1

D2964 CAP
(GRIND FLUSH)



DETAIL C
SCALE 1:10

D2971 SPACER

AFTER FINISH
INSTALL,
D3492-049
PLUG ASSEMBLY
(2 PLACES)

SECTION D-D
SCALE 3:10

AFTER FINISH
INSTALL,
D3492-051
PLUG ASSEMBLY
(2 PLACES)

SECTION E-E
SCALE 3:10

D3662-3 SPACER

SECTION D-D NOTES

AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2971 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.750 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-049 PLUG ASSEMBLY (2 PLACES)

SECTION E-E NOTES

AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-3 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.672 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-051 PLUG ASSEMBLY (2 PLACES)

DETAIL C

D3558-9
D3508-9

NO BOLTS AT
THESE LOCATIONS



D3558-3

D3558-11

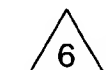
D3508-3

D3508-11

DETAIL H

D3558-13

D3508-13



NO BOLTS AT
THESE LOCATIONS

D3582-041 ASSEMBLY DETAIL

BLACK ANTI-SKID

8.0

16.2

58.4

16.0

5.0

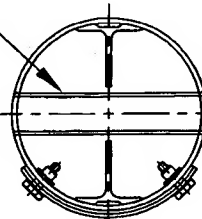
0.8

BLACK ANTI-SKID (TYP)

D3582-041 BLACK ANTI-SKID DETAIL

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 389849

D2973 SPACER
(2 PLACES)



SECTION F-F
SCALE 3:10

SECTION F-F NOTES

AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2973 SPACER (2 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.625 DRILL TO REMOVE SPILL OVER

D3584-1 WEB (REF)

D3662-1 SPACER
(3 PLACES)

AFTER FINISH, INSTALL
AELS-1032-130
INSERT (36 PLACES)



AN3C4A BOLT (1)
AN960C10L WASHER (1)
(28 PLACES)



SECTION G-G
SCALE 3:10

SECTION G-G NOTES

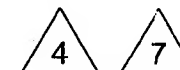
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-1 SPACER (3 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.515 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-053 PLUG ASSEMBLY (6 PLACES)

AFTER FINISH, INSTALL
ALS7-428-165 INSERT (1)
AN4-4A BOLT (1)
AN960JD416L WASHER (1)
(2 PLACES)

AFTER FINISH
INSTALL,
D3492-053
PLUG ASSEMBLY
(6 PLACES)

D3584-1 WEB
(REF)



SEAL WITH
SIKAFLEX -241/-291

D2965 CAP

AN3-5A BOLT (1)
AN960JD10L WASHER (1)
(2 PLACES)

DETAIL H
SCALE 1:5

RELEASED
07.11.22

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED	h	DRAWING NO.	REV. A
MFG. APPR.	h	D3582	SHEET 2 OF 2
APPROVED	h	TITLE	SCALE
DE APPR.	h	BK 117 SKIDTUBE ASSEMBLY	1:20
DATE	07.06.08	<small>COPYRIGHT © 2007 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC</small>	

NO. 148

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliot
Job number: 38322A
Part number: D117 762 041
Description: Skid tube BK117
Welding Process: Tig[☒] Mig[]
Base materiel: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat Duval Date of Test Coupon 08-04-14

Welder Barclay Elliot Date of Test Coupon 08-04-14

The above named individual is qualified in accordance with AWS D17.1.2001 to weld